

Abstract

A method and a system are disclosed for avoiding inter-layer inter-symbol interference. Diagonally layered multi-antenna transmissions are utilised by the proposed method and system. Known symbols are inserted at the borders between different layers to avoid inter-
5 layer inter-symbol interference. The system relies on an improved method to transmit multiple data-streams (layers). The invention describes a method for transmitting data-streams over multiple antennas in an effective and smart way when having frequency selective channels. By utilising a system using the present method problems with inter-layer inter-symbol interference between different data-streams can be avoided when changing transmit
10 antenna for the data-streams. The invention utilises that a diagonal layered multi-antenna transmission will not create inter-symbol interference, ISI, between different layers.